

2002 Recycled Water Task Force
November 19, 2002

Uniform Statewide Recycled Water Criteria

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1

Recycled Water Regulations in California are a Shared Responsibility of Two Agencies

- Public Health issues are handled by the California Department of Health Services (DHS) administered by 21 Districts.
- Permitting of recycled water projects is handled by the 12 different Regional Water Quality Control Boards (RWQCBs) whose primary focus involves regulation of liquid waste discharges.

2

Organization of DHS and RWQCBs

- Within the DHS, water recycling is handled by the Division of Drinking Water and Environmental Management. Field staff reports directly to Sacramento.
- Each RWQCB is controlled by independently appointed boards which reflect different hydrologic conditions and regional perspectives.

3

Why Strive for Consistency?

- Inconsistent regulation of water recycling by state and local officials leads to confusion and uncertainty in how to design and manage water reuse systems and appears to have lead to overly restrictive regulation and added costs, creating an obstacle to achieving the full potential for water reuse.

4

California Legislature Acts to Promote Consistency

- In 1993, AB 704 was enacted to break the log jam of recycled water projects waiting for approval and to promote the concept of statewide uniform recycling criteria.
- Empowered DHS to address unique or new recycled water uses on a case by case basis.
- Limited the authority of a city or county to adopt or enforce regulations involving recycled water beyond that promulgated in the DHS statewide uniform recycling criteria.

5

DHS Shall Establish Uniform Statewide Recycling Criteria

Water Code Sections 13520-13522

- "The State Department of Health Services shall establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves protection of public health."
- "The use of recycled water in accordance with the uniform statewide recycling criteria... does not cause, constitute, or contribute to, any form of contamination, unless the department or the regional board determines that contamination exists."

6

Local Health Officers Duties

Health & Safety Code 116800 and 116805

- “Local health officers may maintain programs for the control of cross connections by water users, within the users premises, where public exposure to drinking water contaminated by backflow may occur.”
- “The programs may include inspections within water users premises for the purpose of identifying cross-connection hazards and determining appropriate backflow protection.”

7

Local Health May Only Collect Fees If Water Supplier Agrees and May Only Conduct Programs In Accord with DHS Regulations

Health & Safety Code 116800 and 116805

- “Local health officers may maintain programs in cooperation with water suppliers...and with the consent of the water supplier, may collect fees”
- “At the discretion of the water supplier, the fees collected from the water supplier by the local health officer may be passed through to water users.”
- “Programs authorized under this section and Section 116800 shall be conducted in accordance with backflow protection regulations adopted by the department.”
- Local health agencies are not empowered to create their own rules and regulations for recycled water.

8

DHS Responsibilities May Only Be Delegated with Consent of Water Supplier, DHS, and County Government

Water Code Section 13554.2

- “With the consent of the person or entity proposing the use of recycled water, the State Department of Health Services may delegate all or part of the duties that department performs...to a local health agency authorized by the board of supervisors to assume these duties,...”

9

Statewide Uniform Criteria Also Applies to Building Codes

- Codes are intended to be consistent throughout the state unless there are material reasons to change them through a public process.
- “The governing body of a city or county, before making any modifications or changes pursuant to Section 17958.5, shall make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographic conditions.”
- Findings must be in public record and filed with the CA Building Standards Commission.

10

Legislative Actions to Discourage Local Code Changes

- The Legislature has restricted and discouraged local jurisdictions from restricting desirable activities through abusive code changes. Examples include:
- Joint living and working quarters
- Solar Energy Systems
- Passive Solar Systems
- Refer to Health & Safety Code Sections 17958.7 through 17959.3

11

Typical Elements of Local Health Regulation of Recycled Water

- Review of plans for irrigation and other recycled water projects which may duplicate regulatory oversight by DHS and by local building code enforcement authority.
- Design requirements for recycled water systems which may be more restrictive than required by CA Plumbing Code, or DHS Title 22 Regulations

12

Misinterpretation of DHS Regulations

- DHS Water Recycling Criteria (Title 22) adopted in 2001, requires annual inspections and cross connection testing every 4 years for dual plumbed systems.
- "Dual plumbed system" or "dual plumbed" means a system that utilizes separate piping systems for recycled water and potable water within a facility and where the recycled water is used for either of the following purposes:
 - a) To serve plumbing outlets (excluding fire suppression systems) within a building or
 - (b) Outdoor landscape irrigation at individual residences.
- At times, DHS and local health agencies have misapplied this requirement to all sites that use both potable and recycled water.

13

Shut-Down Testing

- Can be very invasive to businesses that need to operate on a 24/7 basis.
- Some test procedures require water systems to be shut down for up to 48-hours.
- Statewide regulations authorize inspections "for the purpose of identifying cross-connection hazards and determining appropriate backflow protection".
- Shut-down testing is certainly justified when a facility is converted from potable to recycled water, or when construction has occurred that could not have been inspected in a different manner, or any time the customer requests it.
- Rarely applied to sites with non-potable wells or to commercial and industrial sites with toxic chemicals.

14

Piping Separation Requirements

California Waterworks Standards, Title 22 CCR, Section 64630

- DHS regulations require potable water mains to be installed 10 feet away and 1 foot above sewers and sewage force mains.
- The reason for this requirement, is that sewers often leak and the separation attempts to provide a relatively clean zone around the potable pipes so that repairs can be made with reduced potential for contamination to potable water.
- For piping systems that have tight joints, such as welded steel, the separation required is 4 feet.
- This criteria only applies to waterworks piping and does not apply to piping on private property.

15

Downstream of the Water Meter

- Upstream of the water meter, DHS regulations apply. Downstream of the water meter, the California Plumbing Code applies.
- There are no separation requirements in the California Plumbing Code. Potable water lines and sewage lines may be installed in a common trench. Is this a concern?
- No. Because the pipe construction and operating conditions are different. Either system may be shut down or isolated for repair and the smaller diameter piping is both stronger and has tighter joints than those of public sewers and water distribution mains.

16

If Plumbing Code Allows Sewage and Water in Common Trench, Why Do Some Regulators Try to Enforce Separation of Recycled Water?

- Basically an appropriate requirement has been dragged to the downstream side of the meter to a place it doesn't belong.
- Regulators and many Recycled Water Agencies are familiar with the DHS rules for the public water distribution system, but often lack knowledge about building codes.
- Local health agencies are not authorized to overrule Plumbing Code unless they can demonstrate that the code is inadequate because of climate, topography, or geology.

17

The Florida Example

- Reuse is an integral part of water resources, wastewater, and ecosystem management.
- Florida Legislature has established "The encouragement and promotion of reuse as a formal state objective. Reuse coordinator is responsible for success of program.
- To instill the value of water recycling, the wording "Use it again Florida" appears at the bottom of every page of regulation dealing with water reuse.
- This is reinforced by widespread use of the slogan "More protection, less process."

18

White Paper Recommendations

- **SWRCB should provide oversight to the permits issued by RWQCBs for consistency. Empower key person (ombudsman) to facilitate recycling and arbitrate conflicts.**
- **DHS needs to improve training of field staff about uniform statewide criteria.**
- **Conduct a legal review to determine what authority exists for local agencies to enforce regulations that are more stringent than Titles 17 and 22.**

19

White Paper Recommendations

- **Implement concept of statewide uniformity practiced by building codes, where uniform statewide recycling criteria may only be changed based on proof that they are deficient based on local difference of climate, geology, topography, or other defined criteria.**
- **Investigate the programs in Florida to determine if concepts should be adopted in California.**

20